P2-1402779



County of Roanoke Community Development Planning & Zoning

5204 Bernard Drive P O Box 29800

Roanoke, VA 24018-0798 (540) 772-2068 FAX (540) 776-7155

For Staff Use Only

Date received:	Received by:
Application fee:	PC/BZA-date:
Placards issued:	BOS date:
Care Number 1 1	2615

Check type of application filed (check all that apply) Rezoning A Special Use	□ Administra	tive Appeal	□ Comp Plan (15.2-2232) Review
Applicants name/address w/zip Contact: Gerry Sharpe 2435 N. Central Exp 12TH Fl. Richardson, Texas 7	pressway	Phone: Work: Cell #: Fax No.:	540.354.4100
Owner's name/address w/zip Magnottis Propertie 38 Lakeland Circle Troutville, VA 2417		Phone #: Work: Fax No. #:	540.521.2177 540.343.0555
Property Location 4247 Bonsack Road Roanoke, VA. 24012	Magisterial I	District:	VINTON
	Community	Planning area	BONSACK
Tax Map No.: 040.18-01-34.00-0000	Existing Zon	ing: C2	
Size of parcel(s): Acres:1	Existing Lan	d Use: smal	ll engine service
REZONING, SPECIAL USE PERMIT, WAIVER AND	COMP PLA	V (15.2-2232) I	PEVIEW APPLICANTS (R/S/W/CP)
Proposed Zoning: C2 (no change in zoning request Proposed Land Use: Special Use Permit request :	beca, -		TOWER ss telecommunications facility.
Does the parcel meet the minimum lot area, width, and fr Yes B No I IF NO, A VARIANCE IS R Does the parcel meet the minimum criteria for the reques IF NO, A VARIANCE IS REQUIRED FIRST If rezoning request, are conditions being proffered with t	EQUIRED FI sted Use Type?	RST.	requested district? No □ No ⊠
Yes IS No I IF NO, A VARIANCE IS RED Does the parcel meet the minimum criteria for the reques IF NO, A VARIANCE IS REQUIRED FIRST	EQUIRED FI sted Use Type? his request? PEAL APPLICE	RST. Yes ⊠ Yes □	No □ No ⊠
Yes LY No IF NO, A VARIANCE IS REDOES the parcel meet the minimum criteria for the request IF NO, A VARIANCE IS REQUIRED FIRST. If rezoning request, are conditions being proffered with the VARIANCE, WAIVER AND ADMINISTRATIVE APPLY Variance/Waiver of Section(s) Appeal of Zoning Administrator's decision to	EQUIRED FI sted Use Type? his request? PEAL APPLICE	RST. Yes ⊠ Yes □ ANTS (V/W)	No □ No ⊠ (AA) Zoning Ordinance in order to 1172

JUSTIFICATION FOR REZONING, SPECIAL USE PERMIT WAIVER OR COMP PLAN (15.2-2232) REVIEW REQUESTS

Applicant Morgan Ventures, LLC

The Planning Commission will study rezoning, special use permit waiver or community plan (15.2-2232) review requests to determine the need and justification for the change in terms of public health, safety, and general welfare. Please answer the following questions as thoroughly as possible. Use additional space if necessary.

Please explain how the request furthers the purposes of the Roanoke County Ordinance as well as the purpose found at the beginning of the applicable zoning district classification in the Zoning Ordinance.

This request furthers the purposes of the Roanoke County Ordinance by working within the ordinance guidelines to develop a wireless communications facility that offers needed services for the nearby residential communities, businesses and traffic along the US460 corridor.

The proposed use furthers the purpose of the zoning district classification by offering one of the variety of commercial services allowed by a SUP. This use is consistent with similar existing uses throughout the county adjacent to major arterial throughfares which serve large segments of the county's population. The site location we propose is a service related use that is required by AT&T to fill a void in services that would allow continuity in coverage for E911 emergency call and coverage for traffic on the US460 corridor and nearby residential and commercial users.

Please explain how the project conforms to the general guidelines and policies contained in the Roanoke County Community Plan.

This project conforms to the general guidelines and policies by not only offering a solution for AT&T in the community but also offering an opportunity for other carriers to enter this market and expand their network without the need to propose any additional new wireless communication facilities. The proposed project is designed with a tower to support the equipment for a total of 4 wireless carriers.

Please describe the impact(s) of the request on the property itself, the adjoining properties, and the surrounding area, as well as the impacts on public services and facilities, including water/sewer, roads, schools, parks/recreation and fire and rescue.

There is virtually little to no impact on the subject property as it is zoned C-2 and being used as commercial.

The adjoining properties will only be impacted by the visibility of a portion of the tower that is above the trees. There are numerous trees in the area that will help to block the view of the ground equipment.

The only services required for the project are electric and telephone, so there will be no impact on services at all.

Applicant	
The of Zoning Appeals is required by an be granted. Please read the factor additional space is needed, use add	by Section 15.2-2309 of the Code of Virginia to consider the following factors before a varian ors listed below carefully and in your own words, describe how the request meets each factor. itional sheets of paper.
. The variance shall not be contrar Zoning Ordinance.	y to the public interest and shall be in harmony with the intended spirit and purpose of the
2. The strict application of the zon distinguished from a special privile	ing ordinance would produce undue hardship; a hardship that approaches confiscation (as ege or convenience) and would prohibit or unreasonably restrict the use of the property.
3. The hardship is not shared by oth he Board of Supervisors as amend	er properties in the same zoning district or vicinity. Such hardships should be addressed by ments to the Zoning Ordinance.
4. The variance will not be of a sul	ostantial detriment to the adjacent properties or the character of the district.

JUSTIFICATION FOR ADMINISTRA	TIVE APPEAL REQUEST	
Applicant		
Please respond to the following as thorough	ghly as possible. If additional space is needed, use addi	itional sheets of paper.
1. Reasons for appeal:		-11
7	No.	
	A Property of the second	
	A Committee of the comm	
2, Evidence supporting claim:		
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The second second		

BROADCAST TOWER PREAPPLICATION CONSULTATION CHECKLIST **Applicant Name:** Morgan Ventures, LLC **Consultant Staff Member:** Tammi L. Wood, John Murphy and Rebecca James BROADCASTING TOWERS AND ASSOCIATED ANTENNA PERMITTED BY RIGHT: New and replacement broadcasting towers and associated antenna not exceeding thirty (30) feet in height and located within any commercial or industrial zoning district provided: a) the proposed tower is a monopole type design: b) the general area of the proposed tower is currently served by above ground utilities including electric power and telephone poles: and c) all other use and design standards for the construction of the broadcasting tower and associated facilities are met. Antennas may be installed on any existing structure within the County provided said antenna does not meet the definition of a broadcasting tower, does not increase the height of the existing structure more than ten (10) feet, and does not result in the structure and antenna exceeding the maximum structure height for that zoning district. Temporary towers erected for a period not to exceed twenty-one days. The following information shall be required as part of the Special Use Permit for a Broadcast Tower in addition to standard application requirements. **Proposed Site Qualities** Utilities that are currently present on site: Telephone and Electric Utilities required that are not currently present on site: none Expected route of linkage: Estimated noise level in decibels: Air Condition units @ 56dBA, and the Generator @ 68.6 dBA. **Broadcast Tower** X Lattice Tower ☐ Guyed Tower ☐ Stealth Design (description) Structure Type: Monopole ☐ Other (description) Proposed height of tower excluding antenna: Existing height of surrounding tree canopy and/or buildings: estimated at 80-100 feet Construction material and finish of tower: Specific tower location Finish: matte Longitude: 37° 19 '0.127 Latitude: 79° 52 '37.363 Material: Ground Elevation in mean sea level of the proposed tower site: 1,023.5 feet Tower has structural ability to accommodate: IX Three other providers. ☐ One □ Two Three additional, total of four. Types(s) of Antenna or Other Devices Attached to Tower Omni-Directional Antenna Directional Panel ☐ Parabolic Antenna ☐ Whip Antenna

Material and finish of the proposed antenna(s).

Material: plastic & steel Finish: White

Dimensions of Antenna(s)-height/width/depth

7.1"

/ 11.9"

72.7"/

These 9 questions are more fully answered on EXHIBIT "A"

The following information must be submitted separately in either a written or mapped format.

1)	Information on how the proposed site relates to the applicant's existing communication system including number of other sites within the Roanoke Valley, and the location of the antenna at each site (See Exhibit A,#1)
2)	A map designating the specific coverage area(s) desired with any overflow areas denoted separately. (See Exhibit "C")
3)	A list, with a map, of all the alternative sites considered or evaluated to serve the area of this proposed tower, including other existing tower sites in the vicinity. This should include any co-locations considered and the specific technical, legal or other reasons the other site(s) were rejected. (See Exhibit "D" sites evalulated and rejected.)
4)	Provide conceptual site plan drawn to scale, depicting the location of support structures, equipment enclosures, landscaped areas, fences, lighting, access, limits of disturbed land, average slope of the site, ownership and use of adjoining properties, etc. (Please see the attached EXHIBIT "B" Site Plan drawing)
5)	Provide accurate, to scale, photographic simulations showing the relationship of the proposed broadcast tower and associated antenna to the surroundings. Photographic simulations should include the relationships of any new or modified road or utility corridors necessary to serve the proposed broadcast tower site. (SEE ATTACHED EXHIBIT "E", Photographic simulations
6)	Provide computerized terrain analysis showing the visibility of the proposed broadcast tower and antenna at the requested height and location. If new or modified road, access or utility corridors are proposed, the terrain analysis shall also show the visibility of these new or modified features. (SEE ATTACHED EXHIBIT "F", Terrain Analysis)
7)	Provide detail sheet for broadcast tower structure. (See attached EXHIBIT "G", Tower details)
8)	Provide an accurate description and photograph of the proposed tower structure, including antenna. (See attached EXHIBIT "H" & EXHIBIT "G", Tower details)
9)	Provide detail sheet of any antenna or devises attached to tower including electrical and mechanical specifications for antenna systems. (See attached EXHIBIT "I" Equipment spec sheets, pages 1-34.)
	Notes: These 9 questions are more fully answered on EXHIBIT "A"
	I hereby certify that:
	 All required submittals to the FAA, as required by Zoning Ordinance Section 30-87-2D.6, have been submitted.
	A required on-site balloon or comparable test will be performed on the dates of
	I, the applicant, shall be responsible for all fees associated with the filing of the application, including the reasonable cost of any independent analysis deemed necessary by the County to verify the need for the new broadcast tower. (Dates/to be determined)
	9 01
	Signature: Date: 10/22/14

RESPONSES ARE BELOW IN RED TO ROANOKE COUNT ORDINANCE Sec. 30-87-2.

Roanoke County

- It is the official policy of the county to encourage and promote the collocation of antennas on existing public and private structures within the county.
- Permits for new broadcasting towers should only be requested when no other reasonable alternative exists for locating needed antennas.
- Tower location, height and design should be at elevations lower than surrounding ridge lines are preferred. The use of stealth designs should be considered for any new broadcasting tower.
- Towers and associated antenna not exceeding thirty (30) feet in height and located within any commercial or industrial zoning district shall be permitted by right, subject to certain conditions.

Roanoke County

Sec. 30-87-2. Broadcasting Tower.

(A) Intent:

The intent of these provisions is to regulate the placement of new and replacement broadcasting towers within Roanoke County. These provisions provide broadcasting tower applicants, property owners, and all other Roanoke County citizens clear guidance on the official policies and standards of the County. These policies and standards shall be used by applicants as a guide when selecting alternative broadcasting tower sites and broadcasting tower designs within the county. In addition, the county staff, planning commission and board of supervisors shall use these policies and standards, the Roanoke County community plan and the general special use permit criteria found in section 30-19 as a guide for evaluating any future requests for broadcasting towers.

In the interest of preserving and enhancing the scenic and natural beauty of Roanoke County it is the goal of the county to achieve a long term reduction in the number of broadcasting towers within the county, and where possible, to achieve a reduction in the height of existing broadcasting towers throughout the county, with special emphasis on towers located along or near the ridgetops of major mountains and land forms. In

addition, it is the goal of the county, where possible, to achieve the relocation of existing broadcasting towers and associated utility and access corridors which have a high visual impact on scenic resources. To this end, the county will work cooperatively with broadcasting tower owners and applicants and land owners to achieve these goals. It is the official policy of the county to encourage and promote the collocation of antennas on existing public and private structures within the county. To achieve this end, the county encourages all wireless communication providers to locate new antennas on existing structures. Permits for new broadcasting towers should only be requested when no other reasonable alternative exists for locating needed antennas.

When new broadcasting towers are proposed as a last alternative, the requested broadcasting tower location, height and design should be chosen to protect and enhance the scenic and natural beauty of Roanoke County. Broadcasting tower locations at elevations lower than surrounding ridge lines are preferred. The use of stealth designs should be considered for any new broadcasting tower.

It is the intent of the county to fully comply with all of the applicable provisions of the federal Telecommunications Act of 1996 and other applicable federal and state laws as said laws address and preserve Roanoke County's zoning authority and provide to the communication industry the right and responsibility to provide communication services within their service areas.

(B) Applicability:

- 1. These standards shall apply to all new and replacement broadcasting towers within Roanoke County with the exception that new and replacement broadcasting towers and associated antenna not exceeding thirty (30) feet in height and located within any commercial or industrial zoning district shall be permitted by right provided:
- a. The proposed tower is a monopole type design;
- b. The general area of the proposed tower is currently served by above ground utilities including electric power and telephone poles; and
- c. All other use and design standards for the construction of the broadcasting tower and associated facilities are met.
- 2. No modification to increase the height, size, type or location of any existing broadcasting tower or associated facilities, excluding antennas, shall be made unless such modification results in the full compliance of the broadcasting tower and facilities with all of the requirements of this ordinance.
- 3. Antennas may be installed on any existing structure within the county, without the necessity of obtaining a special use permit, provided said antenna does not meet the definition of a broadcasting tower, does not increase the height of the existing structure more than ten (10) feet, and does not result in the structure and antenna exceeding the maximum structure height for that zoning district.
- 4. These provisions shall not apply to any temporary broadcasting tower erected for the purpose of system design or testing provided the temporary broadcasting tower is erected for a period not to exceed twenty-one (21) days. In addition, in declared local emergency situations, the county administrator shall be authorized to allow the temporary installation of a broadcasting tower for the duration of the local emergency. A zoning permit pursuant to section 30-9 of this ordinance shall be applied for and approved prior to erecting any temporary or emergency tower.
- (C) Application requirements:

- 1. All potential applicants for broadcasting towers shall consult with county planning staff at least thirty (30) days prior to submitting an application for a proposed broadcasting tower. During this consultation the applicant shall present information to the staff on system objectives, proposed coverage areas, and alternative sites considered and rejected. The staff shall provide the potential applicant information on Roanoke County policies and standards for broadcasting towers, and shall discuss with the applicant possible alternatives to broadcasting tower construction. (Meeting was May 29, 2014)
- 2. In addition to the application requirements contained in section 30-19-2 of this ordinance, all applicants for broadcasting towers shall provide the following at the time of application:
- a. The location of all other proposed broadcasting tower sites considered and rejected, and the specific technical, legal or other reasons for the rejection. (No knowledge of any proposed towers.)
- b. The location of all other possible collocation sites considered and rejected, and the specific technical, legal or other reasons for the rejection. (See Exhibit "D", locations considered and rejected before the proposed site was evaluated and approved.)
- c. Accurate, to scale, photographic simulations showing the relationship of the proposed broadcasting tower and associated antenna to the surroundings. Photographic simulations shall also be prepared showing the relationship of any new or modified road, access or utility corridors constructed or modified to serve the proposed broadcasting tower site. The number of simulations and the perspectives from which they are prepared, shall be established with the staff at the consultation required in section C.1. above. (See Exhibit "E" Photographic Simulation, including locations discussed in C.1. above.)
- d. A computerized terrain analysis showing the visibility of the proposed broadcasting tower and antenna at the requested height and location. If new or modified road, access or utility corridors are proposed, the terrain analysis shall also show the visibility of these new or modified features. (See Exhibit "F" terrain analysis and Exhibit "E" Photographic Simulation accurate to scale.)
- e. Information on how the proposed site relates to the applicants existing communication system, including number of other sites within the Roanoke Valley, and the location of the antenna at each site. (See Exhibit "M" which shows how the proposed site relates to existing on air sites, including a list of all the sites in the Roanoke Valley.)
- f. All broadcasting tower applicants shall be required, at their expense to conduct an onsite "balloon" or comparable test prior to the planning commission and board of supervisors hearings on the special use permit. The purpose of this test shall be to demonstrate the potential visual impact of the proposed tower. The dates and periods of these tests shall be established with the applicant at the pre-application consultation. (One balloon test was performed for the photos for the Photographic Simulation and we will be happy to do additional balloon tests on whatever dates the County selects.)
- g. Written verification that all required submittals to the FAA as required by section 30-87-2(D)6 of this ordinance have been submitted. (See Exhibit "J" for verification of FAA filing.)
- 3. The applicant shall be responsible for all fees associated with the filing of the application including the reasonable cost of any independent analysis deemed necessary by the county to verify the need for the new broadcasting tower. The board of supervisors shall establish these fees, which shall be discussed with the applicant at the pre-

application conference. (The applicant understands the possible need for additional services and agrees to pay the cost of such services in a timely manner.)

(D) General standards:

- 1. The maximum height of any proposed broadcasting tower and associated antenna shall be made as a condition of the special use permit, but in no case shall any broadcasting tower and antenna exceed one hundred ninety-nine (199) feet in height. Applicants shall request the lowest broadcasting tower and antenna height necessary to accomplish their specific communication objectives. (The proposed height of 195' is the lowest height required in order to accomplish the specific communications coverage objective. The height of the antennas on the proposed tower is 36 feet lower in elevation to the antennas on the site to the Southwest (site RO406) that it is designed to handoff to; and the proposed site is 56 feet lower than the antennas on the site to the Northeast (site RO422) that it is also designed to handoff calls to. The difference in elevation is the reason that the 195' height is required. See Exhibit "K" which shows the ground elevation and how the proposed site relates to the two existing antenna sites.
- 2. The setback for any proposed broadcasting tower shall, at a minimum, conform to the requirements for principal structures for the proposed zoning district. However, in no case shall the minimum setback from the base of the broadcasting tower to any residential structure on an adjoining lot be less than forty (40) percent of the height of the tower, measured from the closest structural member of the broadcasting tower (excluding guy lines). Guy lines shall be exempt from the minimum setback requirements in side and rear yards for the respective zoning district, but shall comply with the setback requirements for the front yard. (All of the mentioned setbacks have been met and is shown on the submitted Site Plan.)
- 3. The minimum setback from any property line abutting a road right-of-way for any other building or structure associated with a broadcasting tower shall be fifty (50) feet. Such buildings or structures shall be located a minimum of twenty-five (25) feet from any other property line. (All of the mentioned setbacks have been met and is shown on the submitted Site Plan.)
- 4. More than one (1) broadcasting tower shall be permitted on a lot provided all applicable requirements have been met including setback requirements. (The proposed tower at 195' should be adequate to service this area without the need for any additional towers.)
- 5. Broadcasting towers shall not be illuminated with any type of lighting apparatus, unless such lighting is a requirement of the FAA or FCC. When lighting is proposed to conform to federal requirement, the county shall contact the federal agency to verify the necessity of lighting, and to determine the minimal amount and type of lighting necessary to comply with federal guidelines. Security lighting, or a "down lighting" design may be installed on buildings and structures associated with a broadcasting tower. In no case shall any lighting violate section 30-94 of this ordinance. (No lighting is needed or proposed, see Exhibit "J" FAA letter and information.)
- 6. Any proposed broadcasting tower within two (2) miles from any general or commercial airport or located at a ground elevation at or above two thousand (2,000) feet, average mean sea level, shall be referred to the appropriate regional office of the FAA for review and comment prior to filing an application for a special use permit. (Refer to Exhibit "J" FAA letter when reviewing this site.)

- 7. All broadcasting towers shall comply with any additional requirements established in the airport overlay district in section 30-72 of this ordinance, and the emergency communications overlay district in section 30-73. (All guide lines have been followed and Mr. Rodney Thompson of the Roanoke Public Safety system has determined that this site has no impact on the system. See Exhibit "L" to see comments related to this.)
- 8. Any broadcasting tower approved shall be structurally designed to carry sufficient loading, and the site approved shall be sized to accommodate the additional equipment necessary for at least three (3) other vendors/providers of communications services in order to minimize the proliferation of new broadcasting towers in the vicinity of the requested site. In addition, by applying and being granted the special use permit, the applicant and the owner of the land agree to make the broadcasting tower and tower site available for additional leases within the structural capacity of the broadcasting tower and at reasonable costs adequate to recover the capital, operating and maintenance costs of the broadcasting tower location required for the additional capacity. (The tower has been designed to support up to three additional providers of communications services, which equals a total of four providers/carriers.)
- 9. A monopole broadcasting tower design is recommended. The board may approve an alternative broadcasting tower design if it finds that an alternative type of structure has less of a visual impact on the surrounding community and Roanoke County, and/or based upon accepted technical and engineering data a monopole design is not technically feasible. Cost shall not be a criteria for determining broadcasting tower design. (The proposed site consists of a lattice tower because we feel it will have a less visual impact on the surrounding community and the County. The nearby towers are also of a lattice design and the majority of the towers within four miles are also lattice towers. Therefore we feel that the lattice design is consistent with the surrounding area and will blend in best.)
- 10. No broadcasting towers shall be permitted within the critical viewsheds of the Blue Ridge Parkway or Appalachian Trail as shown on any official map designating these viewsheds and pre-approved by the board of supervisors. In addition, no towers shall be proposed within any other designated area of local scenic, historical, ecological and cultural importance as designated and approved by the board of supervisors prior to the filing of a tower application. (The applicant understands that approval will be required by the Blue Ridge Parkway in order to move forward. Applicant will make sure that a representative from the Blue Ridge Parkway can attend a balloon test in order for them to render an informed opinion on the subject site.)
- 11. By applying and being granted the special use permit, the applicant and the owner of the land agree to dismantle and remove the broadcasting tower and associated facilities from the site within ninety days of the broadcasting tower no longer being use for wireless communications. Dismantling and removal from the site shall only be required after notice by the County. If antennas on any approved tower are relocated to a lower elevation, the tower shall be shortened to the height of the highest antenna. A bond or similar performance guarantee may be required as part of the special use permit approval. Said guarantee will be in an amount sufficient to ensure removal of the tower and all associated facilities and the reclamation of the property and road, access and utility corridors to a condition that existed prior to tower construction. (The applicant acknowledges the requirements of the terms stated here and agrees to comply.)

- 12. All broadcasting tower structures and associated hardware, antennas, and facilities shall be a flat matted finish so as to reduce visibility and light reflection unless otherwise required by the FCC or FAA. (The tower will be a flat matted finish and has been designed to this specification.)
- 13. No business signs shall be allowed on the property identifying the name of, or services offered by, any business associated with the broadcasting tower. (The applicant agrees to comply with this and will not have any business signs at this site. The only signs will be those required and mandatory by State and Federal agencies, along with a site name and phone number for emergency notice.)
- (E) General review policies:
- All special use permit requests for new broadcasting towers, including the replacement or modification of existing broadcasting towers shall be reviewed by the staff, planning commission and board of supervisors on the basis of the following criteria:
- 1. The extent to which the broadcasting tower proposal conforms to the general special use permit criteria in section 30-19 of this ordinance, and the intent, application requirements, and general standards for broadcasting towers found in these provisions. (The applicant understands and acknowledges these requirements.)
- 2. The demonstrated willingness of the applicant to evaluate collocation opportunities within the proposed communication service area, and the demonstrated history of the applicant choosing collocation sites within the Roanoke Valley. (The applicant exhausted all options for collocation and only found the owner of the subject property willing to lease enough ground space for a communications site.)
- 3. The base and top elevation of the proposed broadcasting tower relative to surrounding natural land forms. Notwithstanding any other provision of this section, broadcasting tower locations below surrounding ridge lines are preferred. (The elevation of the tower is below the surrounding ridge lines.)
- 4. Broadcasting tower locations already served by existing roads and utilities are preferred due to the potential detrimental environmental and visual impacts resulting from the construction of new road and utility corridors. (The site is designed to access the from the existing Bonsack Road and will only require a gravel road approximately 160 feet from the existing blacktop.)
- 5. Within the needed service area, the availability of other existing structures that are, based upon independent analysis, of suitable height, design, and location for the needed antenna. (No existing structures in the area were acceptable due to the fact that there is nothing taller than sixty feet.)
- 6. The visibility of the broadcasting tower from the surrounding community and neighborhood compatibility of the tower as determined by the submitted computer simulations, terrain analysis and balloon or comparable test. (The applicant acknowledges this criteria.)
- 7. The degree to which the proposed tower location, site design and facilities including fencing, buildings and other ground mounted equipment and new or modified road, access or utility corridors are located, designed and constructed to be compatible with the neighborhood. (The applicant acknowledges this criteria.)

(Ord. No. 82493-8, § 4, 8-24-93; Ord. No. 102798-12, § 1, 10-27-98)

EXHIBIT A

RESPONSES TO PRE-APLICATION CHECKLIST QUESTIONS 1 thru 9:

- 1. The proposed site is a 195' tower with a ground elevation of 1,023.5 feet and relates to the existing on air AT&T sites by filling a void and offering continuity in the coverage along US460 and the surrounding residential neighborhoods and commercial businesses.(see attached map Exhibit B, that shows how this site relates to adjacent and nearby existing sites.) The adjacent handoff site to the southwest is approximately 1.72 miles. This is an American Tower Corporation site consisting of a Lattice Tower 200 feet in height with a ground elevation of 1,058 feet. AT&T is located on this tower at a height of 196 feet, site number is RO406. The handoff site to the Northeast 1.27 miles, is an existing AT&T site known as RO422. This site is an AEP Transmission Tower and AT&T is located at a RAD of 130 feet with a ground elevation of 1,142 feet.
- 2. See EXHIBIT C, this is a propagation map that shows the specific area that this site is designed to cover. Page 2 of Exhibit "C" shows the specific coverage of the proposed site. Page 3 of Exhibit "C" shows the coverage of the proposed site along with the coverage of the two adjacent sites, which shows the seamless coverage of the three sites.
- 3. See Exhibit "D" sites evaluated, which consists of a list and map of the alternative sites considered and evaluated to serve the objective of this site. No existing structures in the area could offer anywhere near the height or location to meet the coverage objective. Two existing sites are shown and AT&T is located on one and the other is too close to the first.
- 4. Please see the attached EXHIBIT "L" Site Plan Drawings (6 pages) which include all the requested information on the site plan page and additional pages of the exhibit.
- 5. Please see the attached **EXHIBIT** "E", Photographic Simulation.
- 6. Please see the attached EXHIBIT "F", Computerized Terrain Analysis.
- 7. Please see the attached EXHIBIT "G", Tower Structure Details.
- 8. Please see the attached EXHIBIT "H" which includes two photos, one of the tower, a second of the tower and antennas. See EXHIBIT "G" for details and description of the tower.
- 9. Please see the attached EXHIBIT "I" which includes antenna and all other equipment specifications.

PROJECT INFORMATION INSTALLATION OF WIRELESS COMMUNICATION SCOPE OF WORK: ANTENNAS ON A PROPOSED SELF SUPPORT TOWER. SITE ADDRESS: 4247 BONSACK RD NE ROANOKE, VA 24012 LATITUDE: N 37° 19' 00.127" LONGITUDE: W 79° 52' 37.363" 1.023.5'± AMSL GROUND ELEVATION: TAX PARCEL #: 040.18-01-34.00-0000 PARCEL SIZE: 1 ACRE DEED REF.: INS. #201214943 ZONING: JURISDICTION: ROANOKE COUNTY DISTRICT: HOLLINS DISTRICT PROPERTY OWNER MAGNOTTIS PROPERTIES, LLC 38 LAKELAND CIR TROUTVILLE, VA 24175 MORGAN VENTURES NAME OF APPLICANT: UTILITY INFORMATION POWER: AFP (800) 277-2177 VERIZON TELCO: (800) 483-5000 DRAWING INDEX REV T-1TITLE SHEET 2 2 SP-1 SURVEY PLAT SITE PLAN A-0COMPOUND PLAN & TOWER ELEVATION SHELTER DETAILS FENCE AND GATE DETAILS



MORGAN VENTURES, LLC

SITE NAME: RO580

VICINITY MAP

DIRECTIONS:

FROM I-581 S / US-220 S TOWARD US-220 S 1.1 MI. AT EXIT 4E, TAKE RAMP RIGHT AND FOLLOW SIGNS FOR US-460 EAST 0.5 MI. KEEP STRAIGHT ONTO US-221 N / US-460 E, PASS HESS IN 1.4 MI, 4.0 MI. BEAR RIGHT ONTO BONSACK RD NE 433 FT. ARRIVE AT SITE ACCESS ENTRANCE ON THE RIGHT. THE LAST INTERSECTION IS VA-609 / E RURITAN RD. IF YOU REACH STONEY RIDGE DR, YOU'VE GONE TOO FAR.



SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:

INTERNATIONAL BUILDING CODE (IBC 2009)

ELECTRICAL CODE: NEC 2005, NFPA 70

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.

AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:

TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM

IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

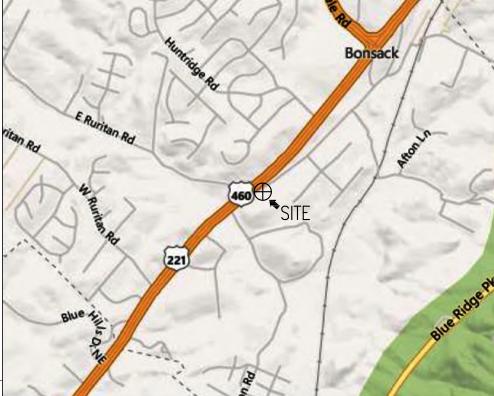
IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.



NOTES

MAGNETIC DECLINATION - 8.66° W CHANGING BY 0.05° W PER YEAR AS OF 10/24/2014

SCALE: 1"=2000'



AT&T COMPLIANCE: ______AT&T RATE: _____

BC

engineers

5661 COLUMBIA PIKE, SUITE 200 FALLS CHURCH, VA 22041–2868 TEL: (703) 671–6000 FAX: (703) 671–6300 SITE NAME: R0580

SITE ADDRESS: 4247 BONSACK RD NE ROANOKE, VA 24012



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AT&T CONSTRUCTION:

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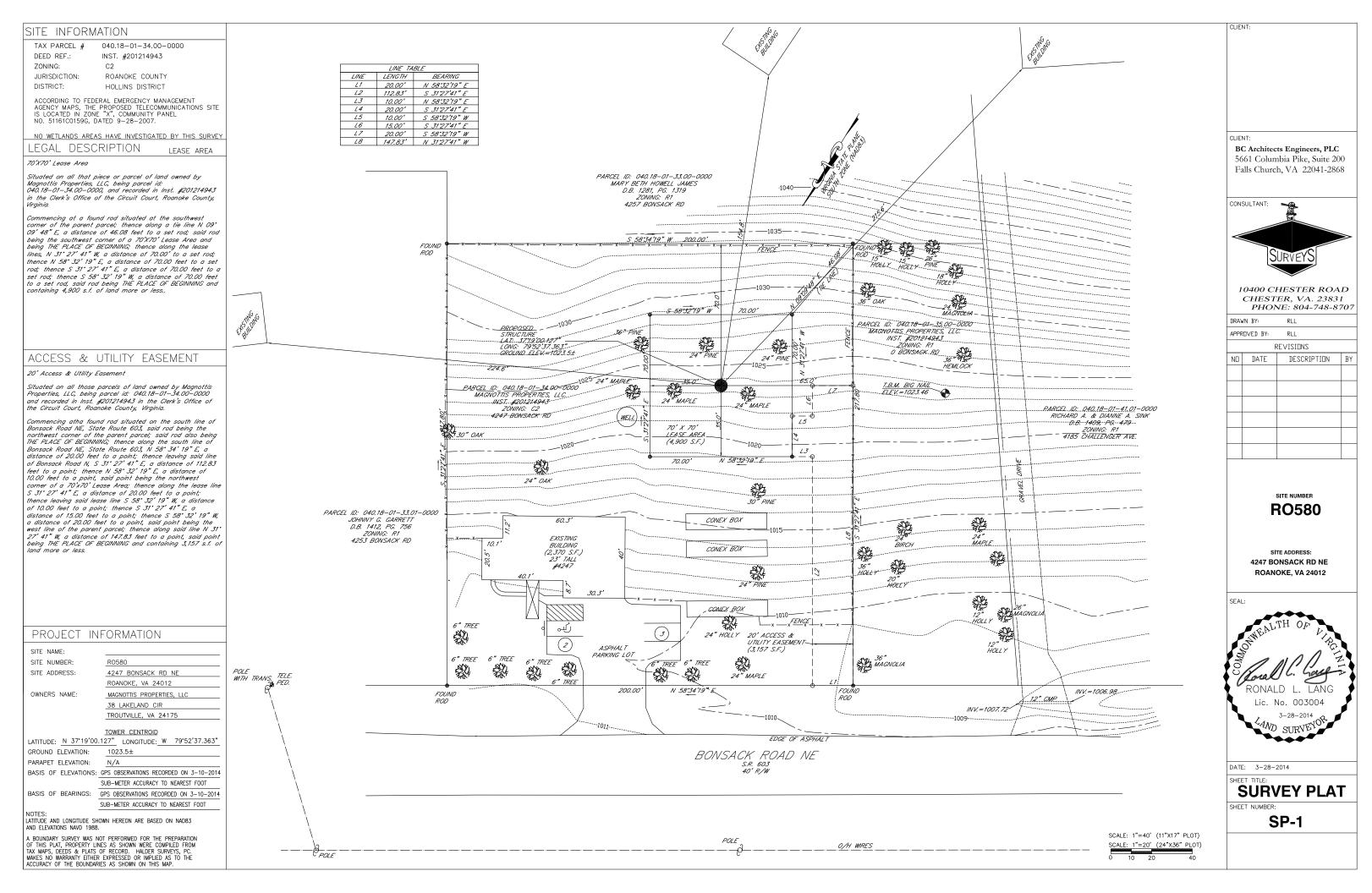
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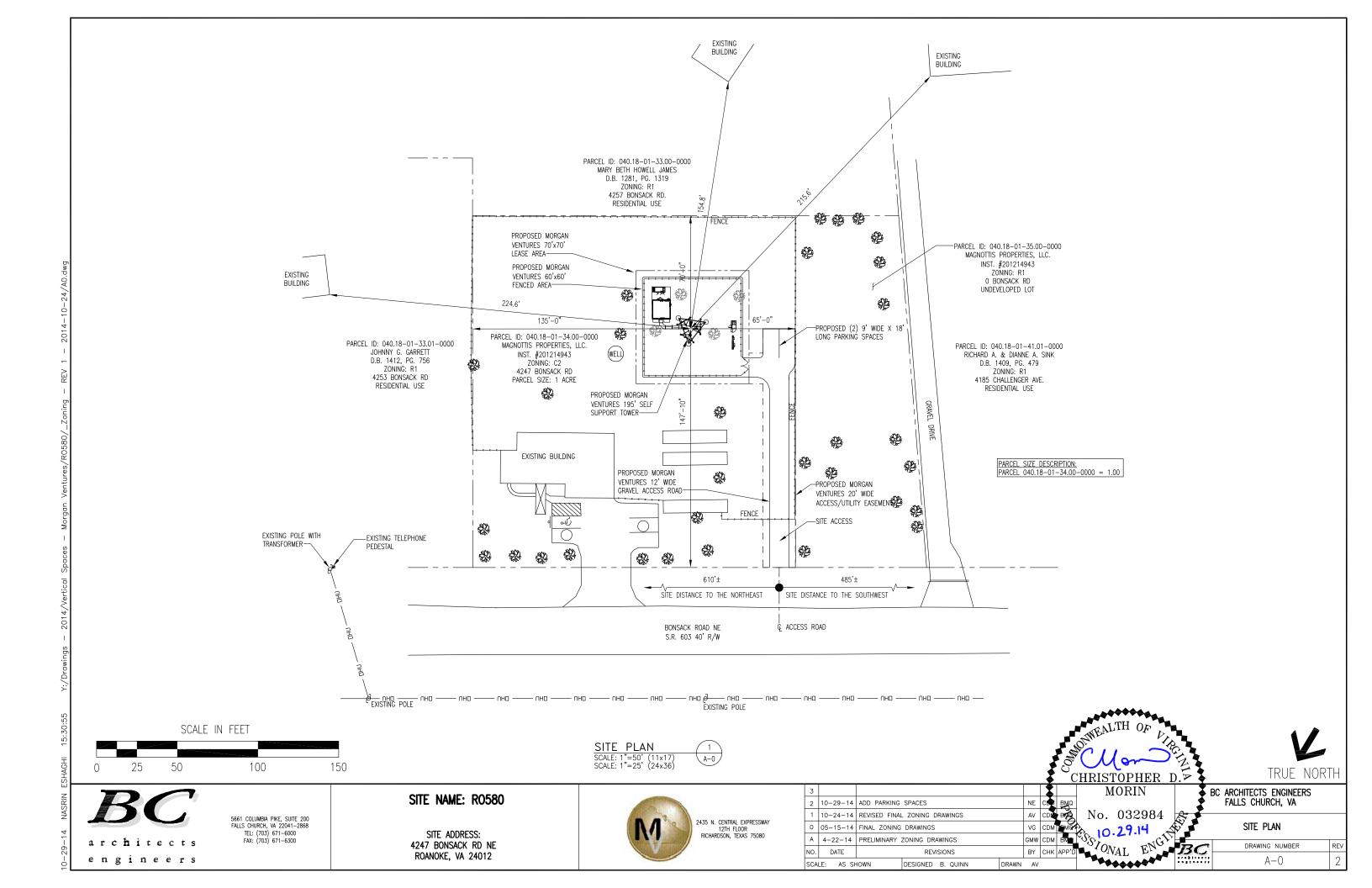
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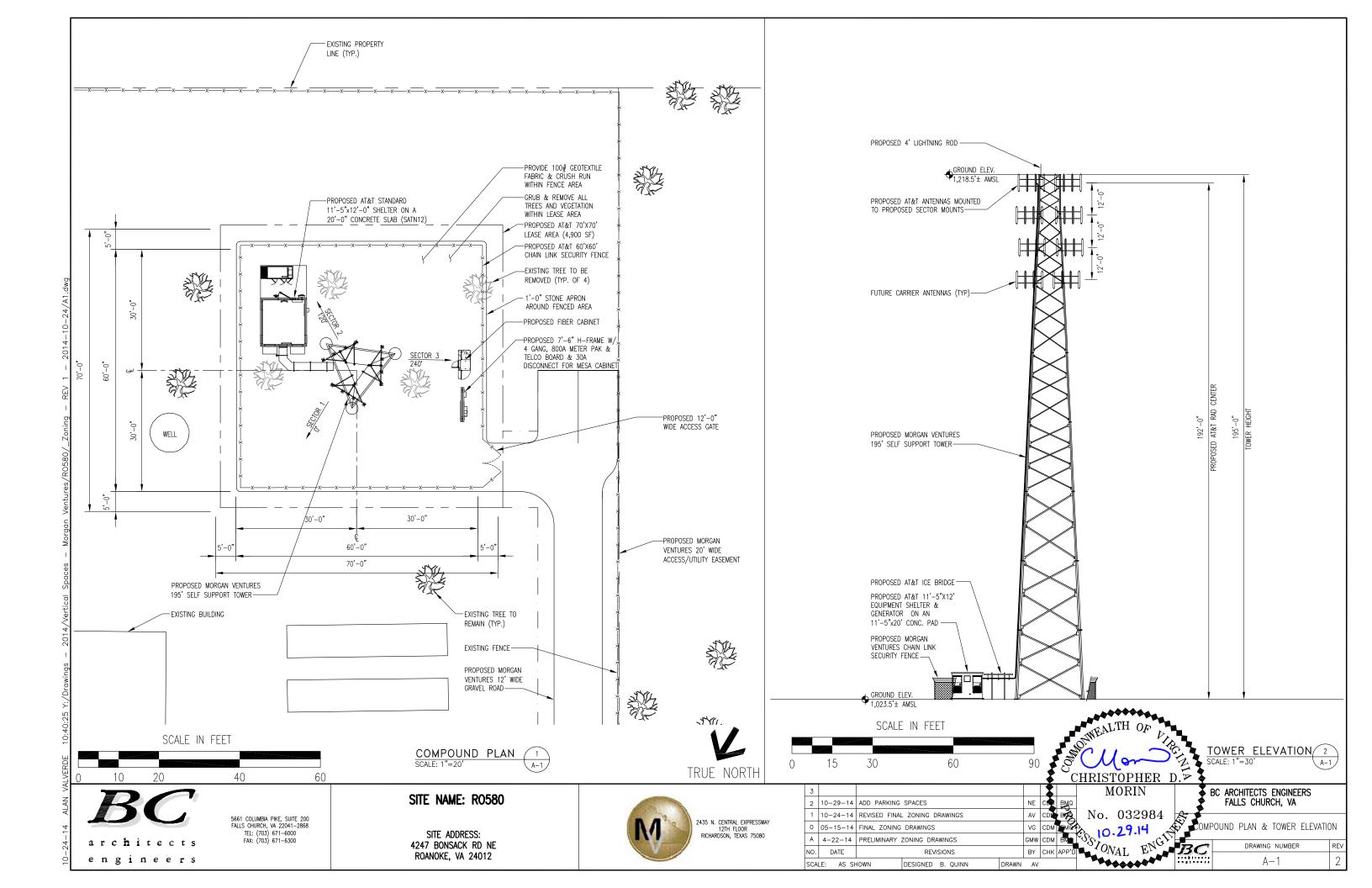
ONAL ENGINEERS
FALLS CHURCH, VA

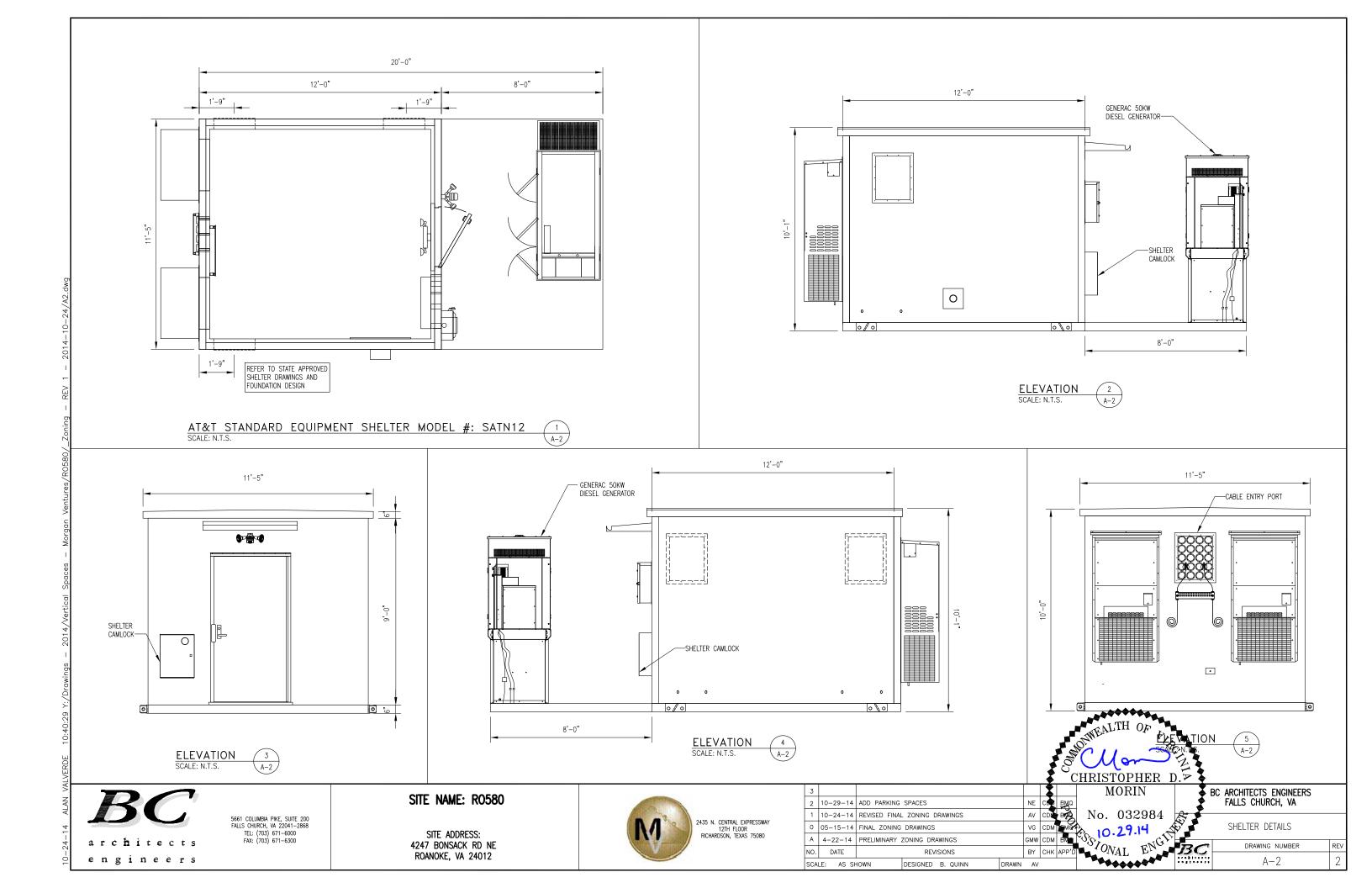
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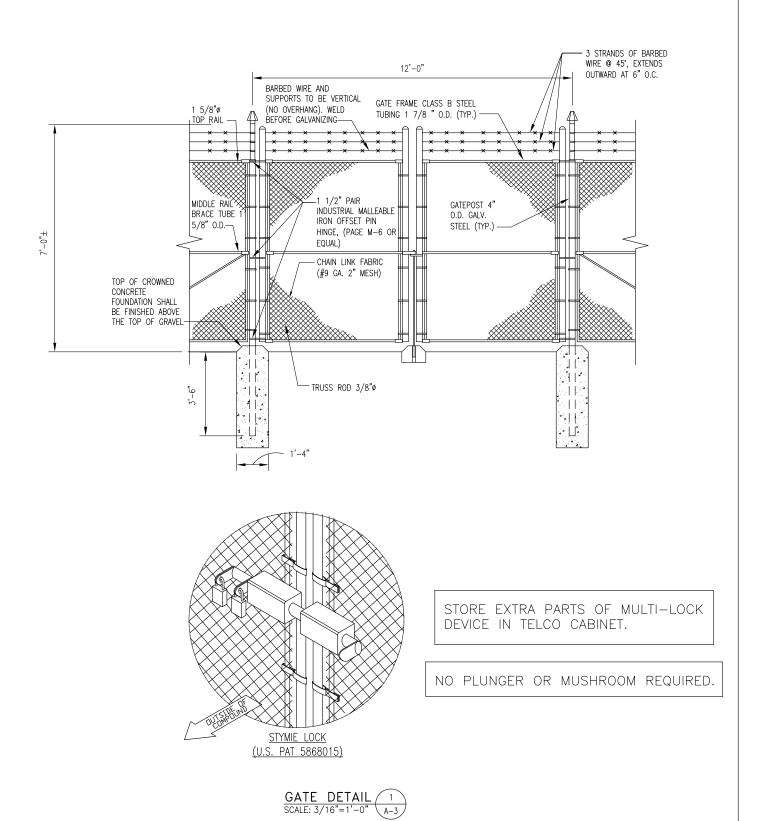
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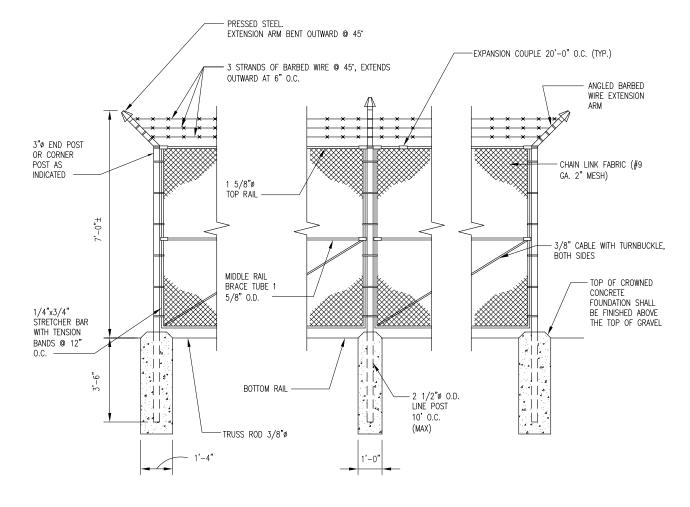












FENCE SECTION DETAIL SCALE: 3/16"=1'-0"

5661 COLUMBIA PIKE, SUITE 200 FALLS CHURCH, VA 22041–2868 TEL: (703) 671–6000 FAX: (703) 671–6300

SITE NAME: RO580

SITE ADDRESS: 4247 BONSACK RD NE ROANOKE, VA 24012



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FENCE AND GATE DETAILS

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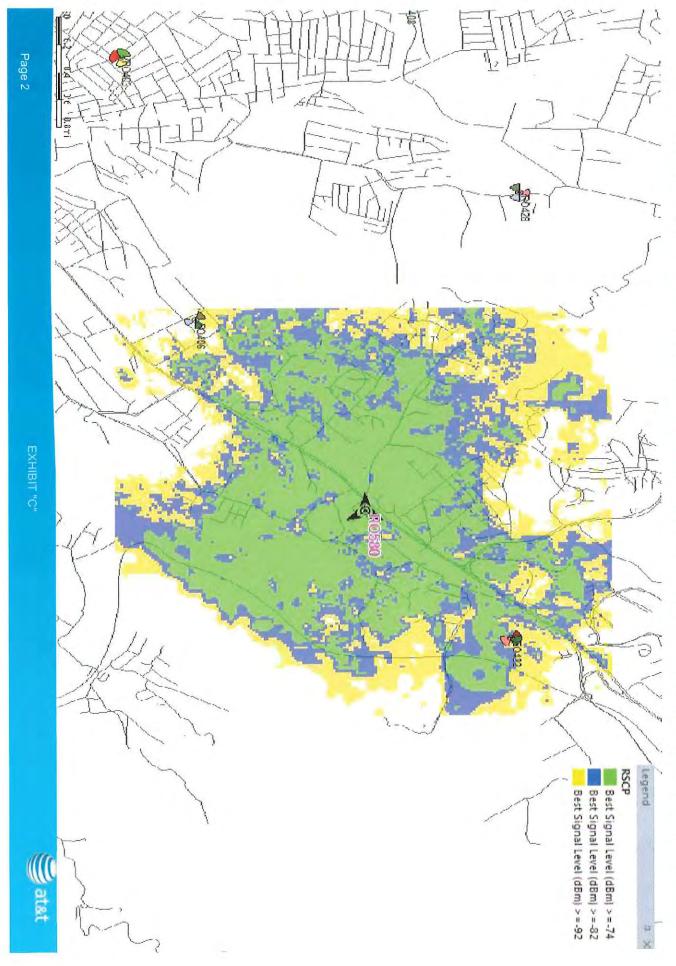
engineers

MORIN BC ARCHITECTS ENGINEERS FALLS CHURCH, VA

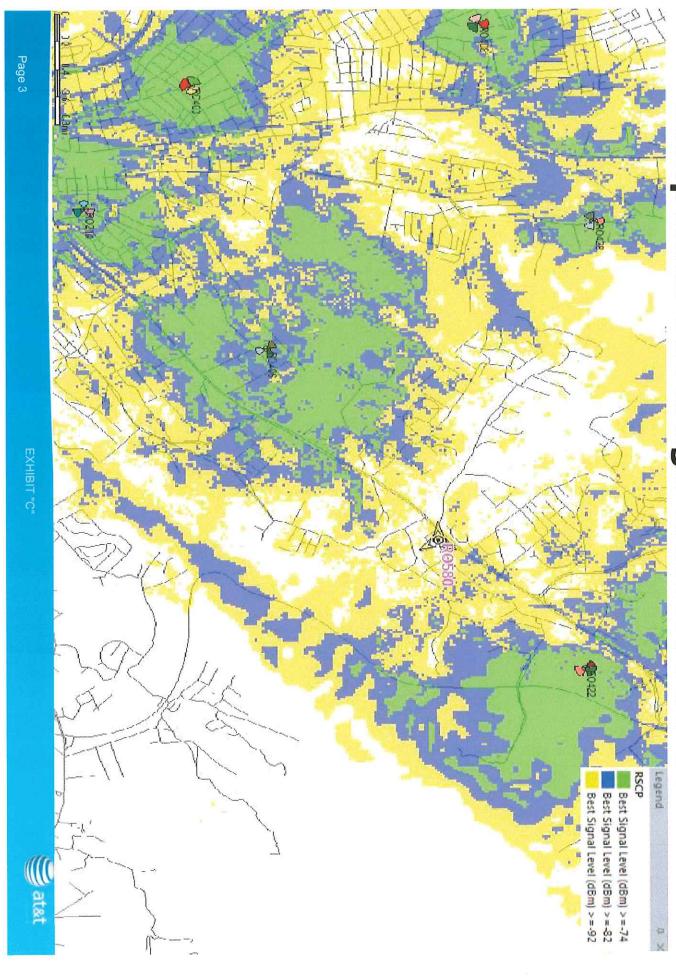
EXHIBIT "C" RO580 Area Coverage



EXHIBIT C, MAP OF SPECIFIC COVERAGE OF PROPOSED SITE AT 195 FEET



Composite Coverage With RO580 Off



omposite Coverage With R0580 @ 195ft

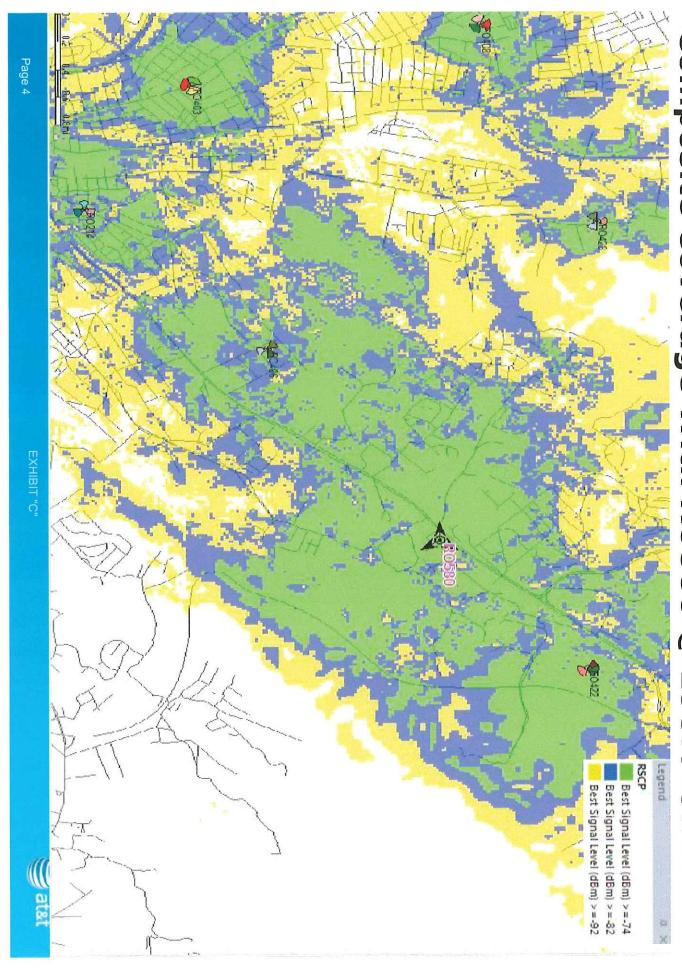
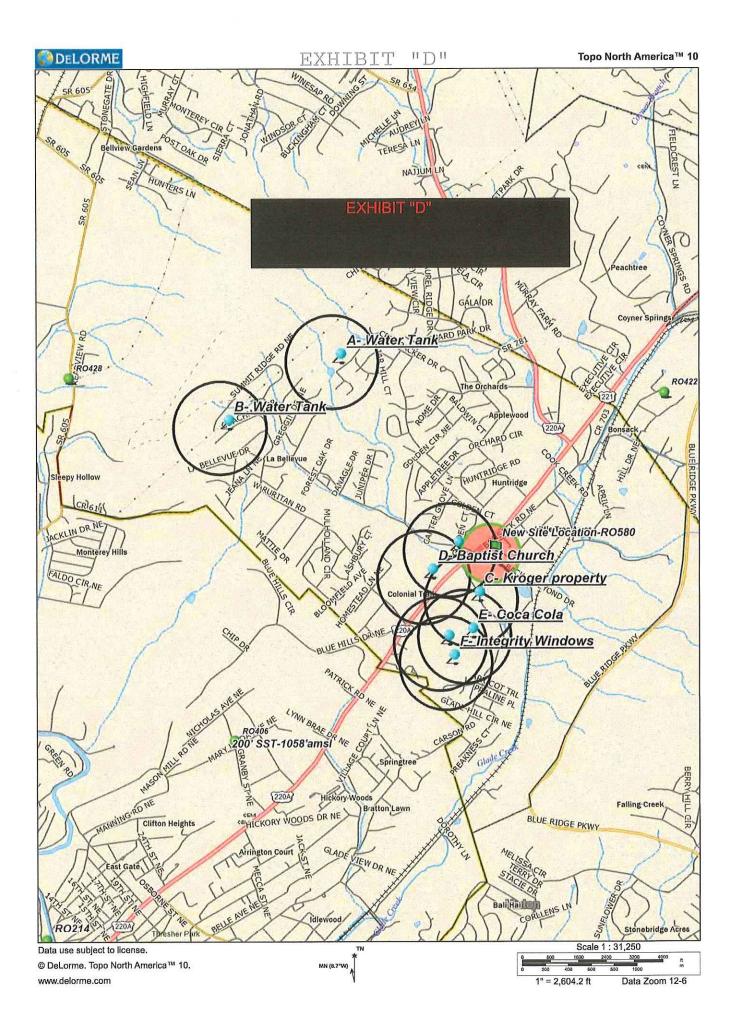
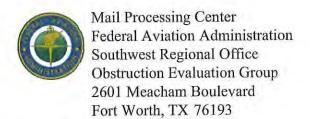


EXHIBIT "D"

A- Water Tank B- Water Tank C- rooftop of Kroger shopping Center D-Villa Heights Baptist Church E- Coca-Cola property(Valley Gateway Business Park) F- Integrity Windows Inc.(Valley Gateway Business Pk) G- F & W Properties II Inc.(Valley Gateway Business Pk) H- Potomac Conference Corp.(Seventh Day Adventists) ADDRESS off of Crumpacker Dr off of Ocachman Circle off of Valley Gateway 4080 Challenger Ave	ADDRESS COORDINATES off of Crumpacker Dr off of Coachman Circle off of Valley Gateway Blvd 4080 Challenger Ave 4022 Integrity Drive 4050 Integrity Drive 0 Valley Gateway Blvd 37.315037 -79.88007 4050 Integrity Drive 37.308539 -79.88097 0 Valley Gateway Blvd 37.308539 -79.88097 4120 Challenger Ave 37.315685 -79.88039	COORDINATES 37.332204 -79.893141 37.328767 -79.900919 37.313123 -79.87999 37.315037 -79.872680 37.311107 -79.880073 37.308539 -79.880979 37.308539 -79.880390 37.315685 -79.880390	IS NOT WORKABLE TO MEET THE MINIMUM COVERAGE OBJECTIVE not of sufficient height not of sufficient height not of sufficient height owers not interested in leasing ground space	T THE MINIMUM T THE MINIMUM T THE MINIMUM ing ground space
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D-Villa Heights Baptist Church E- Coca-Cola property(Valley Gateway Business Park)	4080 Challenger Ave 4022 Integrity Drive	37.315037 -79.872680 37.311107 -79.880073	owers not interested in leas owers not interested in leas	ing ground sp
F- Integrity Windows Inc.(Valley Gateway Business Pk) G- F & W Properties II Inc.(Valley Gateway Business Pk)	4050 Integrity Drive O Valley Gateway Blvd	37.308539 -79.880979 37.308539 -79.880979	owers not interested in leas owers not interested in leas	ing ground sp ing ground sp
H- Potomac Conference Corp. (Seventh Day Adventists) 4120 Challenger Ave	4120 Challenger Ave	37.315685 -79.880390	owers not interested in leasing ground space	ing ground sp
l- Magnottis Properties, LLC	4247 Bonsack Road	37.316363 -79.876377	Subject of proposed site, zoned properly and owner signed lease.	ned properly
Existing Tower Sites (2) Crown Castle- 285' Lattice Tower	3000 Nicholas Ave	N37 18 16 W79 54 21	Existing Lattice Tower am:	amsl 1,058', to close to
American Tower Corp 200' Lattice Tower	1715 Granby Street	N37 18 08.2 W79 54 08.2	14	amsl 1,073', AT&T is on
SEE ATTACHED MAP FOR ALL LOCATIONS				

M





Issued Date: 08/05/2014

David Losoncy Morgan Ventures, LLC 2435 N. Central Expressway 12th Floor Richardson, TX 75080

EXHIBIT "J"

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:

Antenna Tower RO580

Location:

Roanoke, VA

Latitude:

37-19-00.12N NAD 83

Longitude:

79-52-37.36W

Heights:

1023 feet site elevation (SE)

199 feet above ground level (AGL) 1222 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 02/05/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 32I-7755. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AEA-4918-OE.

Signature Control No: 224977943-225959870

(DNE)

Debbie Cardenas Technician

Attachment(s) Frequency Data

cc: FCC

Frequency Data for ASN 2014-AEA-4918-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

EXHIBIT "J"



OPINION LETTER

July 31, 2014

Nathan Byrd BC Architects Engineers, PLC 5661 Columbia Pike, Suite 200 Falls Church, VA 22041-2882

RE: RO580, VA Airspace Analysis

Latitude (NAD-83): 37° 19' 00.12" N
Longitude (NAD-83): 79° 52' 37.36" W
Ground Elevation: 1023.0 ft AMSL
Tower tip height: 199.0 ft AGL
Overall height: 1222.0 ft AMSL



Dear Mr. Byrd,

Our airspace analysis results for the RO580, VA site are as follows:

- 1. Filing an FAA Form 7460-1 is not required for the proposed height of 199.0 ft AGL (1222.0 ft AMSL). The maximum allowable height for not filing an FAA Form 7460-1 is 200 ft.
- 2. FCC's TOWAIR Determination indicates that this structure does not require FCC registration.
- 3. Wireless Applications Corp. generally recommends filing an FAA Form 7460-1 for tower heights of 180 ft to 200 ft at this location that are within 5 nm of the nearest public-use airport.
- 4. The FAA time frame for the proposed 1222.0 ft AMSL overall height will be 45 days.
- 5. The proposed site is 4.393 nm East from the nearest public landing facility Roanoke Rgnl/Woodrum Field (ROA). At an overall height of 1222.0 ft AMSL, it does not exceed FAR 77.9 (a) or FAR 77.9 (b) Notice Criteria for ROA airport. This airport has both Circling and Straight-In Instrument approach procedures. It does not exceed any glide slopes of ROA airport. Roanoke Rgnl/Woodrum Field (ROA) is an airport type landing facility and it is associated with the city of Roanoke, VA.
- 6. The proposed site does not exceed any of the instrument approach procedures of ROA airport.
- 7. The nearest private landing facility is Summit (2WV5), which is a heliport type landing facility not eligible for study under FAR Part 77 sub-Part C. It is 3.11 nm NW from the proposed site.
- 8. The proposed 199.0 ft AGL tower would not adversely affect low altitude en route airways and/ or VFR routes in the area.
- 9. The nearest AM tower is WKBA, which is 3.12 mi (5027 meters) away bearing 233.92°. WKBA AM is operating a directional type antenna system. As noted per the FCC AM Tower Locator and per FCC regulation 13-115, Section 1.30002, the structure will not require a "Proof of Performance" measurement study before and after construction.
- 10. Marking and lighting are not required for the proposed tower height of 199.0 ft AGL.
- 11. The FAA Form 7460-1 for RO580, VA at 199.0 ft AGL was filed on July 25, 2014 with the FAA and assigned ASN 2014-AEA-4918-OE.
- 12. All Wireless Applications Corp. analyses are based on the latest Airspace program.

If you have any questions, please do not hesitate to call.

Thank you.

Ronald W. Lageson, Jr. 425-643-5000 (office) 425-649-5675 (fax)



TOWAIR Determination Results

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.

Your Specifications

NAD83 Coordinates

Latitude	37-19-00.1 north
Longitude	079-52-37.4 west

Measurements (Meters)

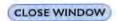
Overall Structure Height (AGL)	60.7
Support Structure Height (AGL)	59.4
Site Elevation (AMSL)	312

Structure Type

LTOWER - Lattice Tower

Tower Construction Notifications

Notify Tribes and Historic Preservation Officers of your plans to build a tower.



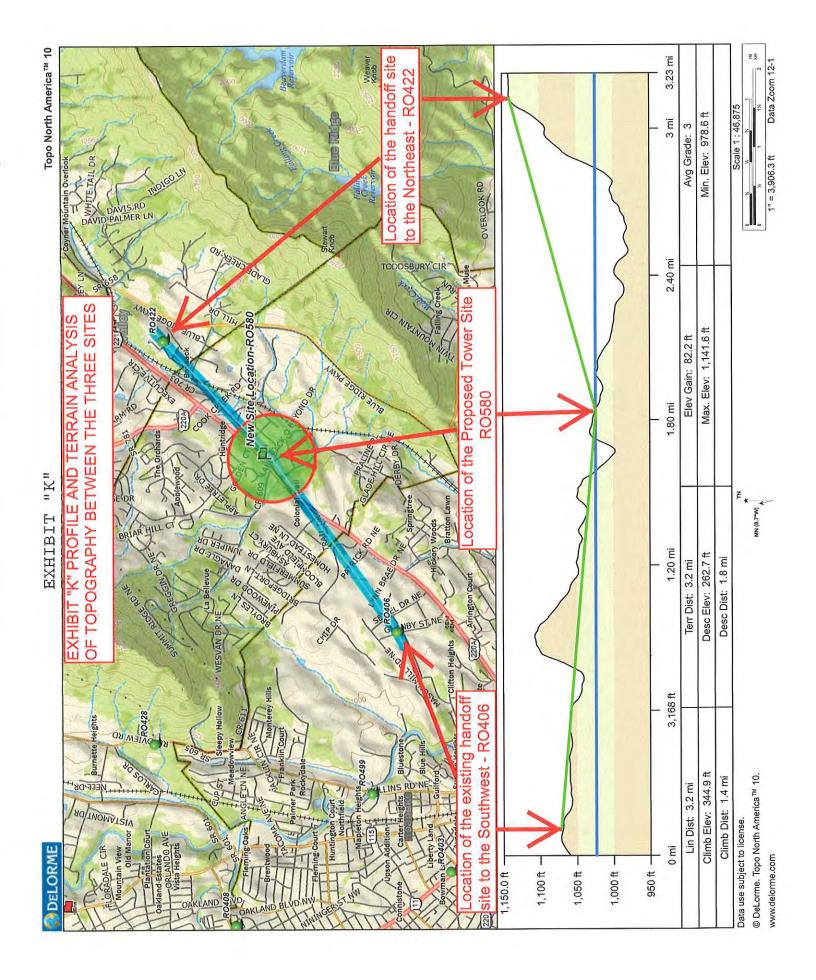


EXHIBIT "L" Public Safety System

Subject: Morgan Ventures SUP Application

Friday, June 13, 2014 at 3:01:27 PM Eastern Daylight Time Date:

Tammi Wood From:

To: gerrysharpejr@gmail.com

John Murphy, Rodney Thompson, Susan McCoy CC:

Mr. Sharpe,

The Communications Coordinator, Mr. Rodney Thompson was able to look at the site plan package that you previously submitted. He commented as follows:

"I dont see any impact from this on Roanoke's Public Safety system"

Please note that this pre-review is only one piece of the total review process for the application. This department will review the application again for completeness and is only one of the many entities that will formally review the application. The formal review can only be initiated after the application has been formally submitted and accepted for processing.

Just as a reminder, the next Planning Commission application deadline date is Friday, June, 20, 2014. The entire completed application package must be submitted by close of business that day. As previously discussed, you are welcome to forward this package to staff for a pre-review to ensure that all the required pieces are in the package prior to that date. Please allow a couple of days for review prior to Friday.

Thank you and please let me know if you have any questions along the way.

Sincerely,

Tammi L. Wood Planner II County of Roanoke Department of Community Development 5204 Bernard Drive Roanoke, VA 24018 (540) 772-2068 ext. 226